

Weekly COVID-19 Update in Montana (as of 12/3/2021)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of December 3, 2021. Data are provisional and expected to change as more information is received.

Case Data

Table 1. Summary of COVID-19 Activity – Montana, as of 12/3/2021

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	192,537	2,224	+17%
LABORATORY TESTS	2,156,102	29,511	-1%
HOSPITALIZATIONS	10,083	207	-17%
DEATHS	2,768	130	+83%

Figure 1. COVID-19 Cases and Hospitalizations over Time - Montana, as of 12/3/2021

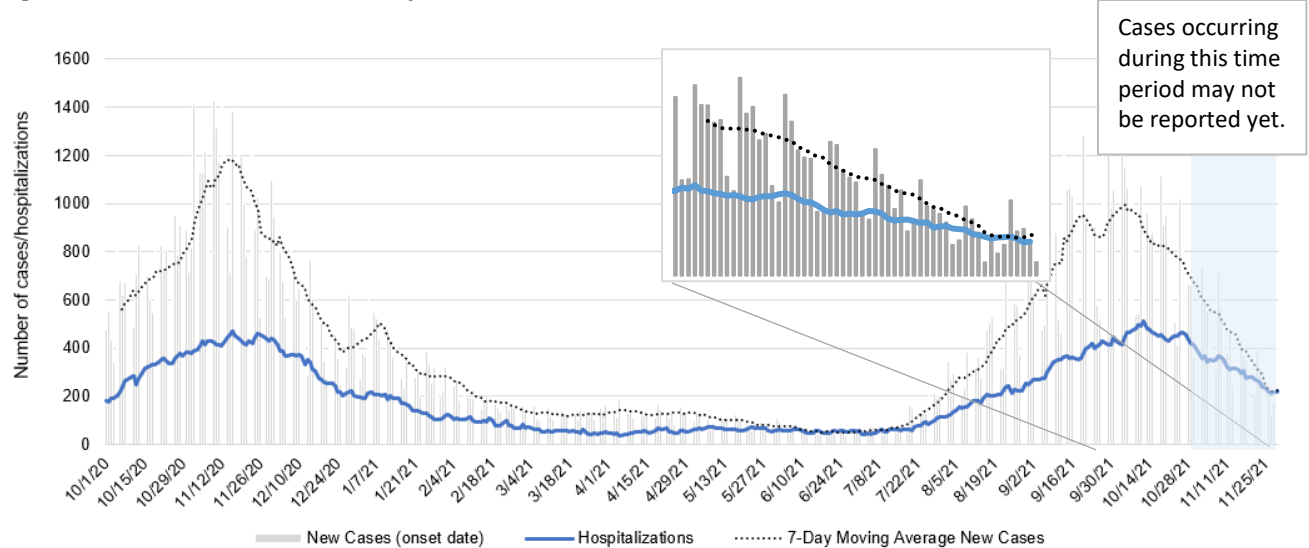
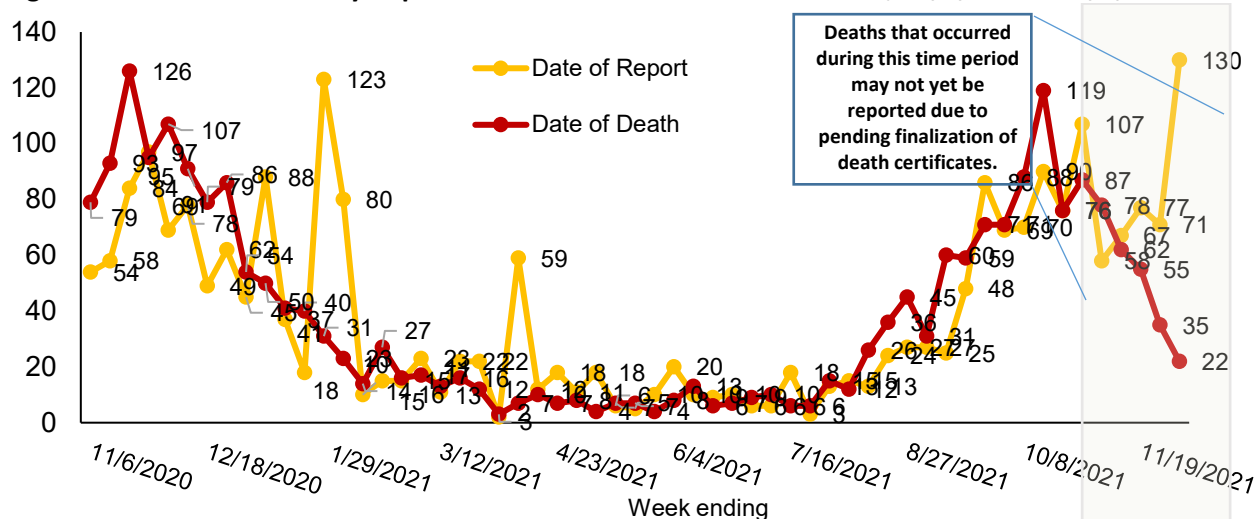


Figure 2. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 12/3/2021



Vaccine Data

Montana began vaccinating individuals in mid-December 2020 with a phased process: Phase 1A on December 14, 2020, Phase 1B on January 19, 2021, and Phase 1B+ on March 8, 2021. Vaccinations were opened to all Montanans age 16+ on April 1, 2021 and expanded to all Montanans age 12+ on May 10th, 2021. Most recently, the Pfizer vaccine was approved for the 5-11 year old age group on October 29th, 2021. To date, 1,244,162 doses have been given across the state and 51% of the eligible population is considered fully vaccinated (table 3).

Table 2: COVID-19 Vaccine Doses Administered for the 12 and older population – Montana, as of 12/3/2021

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 11/19	WEEK ENDING 11/26	WEEK ENDING 12/3*
TOTAL DOSES ADMINISTERED	1,228,590		24,164	14,995	20,414
DOSE 1 ADMINISTERED	581,928	63%	3,654	2,650	3,137
FULLY VACCINATED INDIVIDUALS	519,348	56%	2,650	1,654	2,116

*the data for the most recent week are preliminary and are expected to be an underestimate of the doses administered during the week, due to a reporting lag.

Table 3: COVID-19 Vaccine Doses Administered for the 5 and older population – Montana, as of 12/3/2021

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 11/19	WEEK ENDING 11/26	WEEK ENDING 12/3*
TOTAL DOSES ADMINISTERED	1,244,162		27,680	16,942	24,965
DOSE 1 ADMINISTERED	593,878	58%	7,169	4,374	4,290
FULLY VACCINATED INDIVIDUALS	522,969	51%	2,651	1,877	5,513

*the data for the most recent week are preliminary and are expected to be an underestimate of the doses administered during the week, due to a reporting lag.

Figure 3. COVID-19 Vaccine Doses Administered by Week, 5+ Years – Montana, as of 12/3/2021

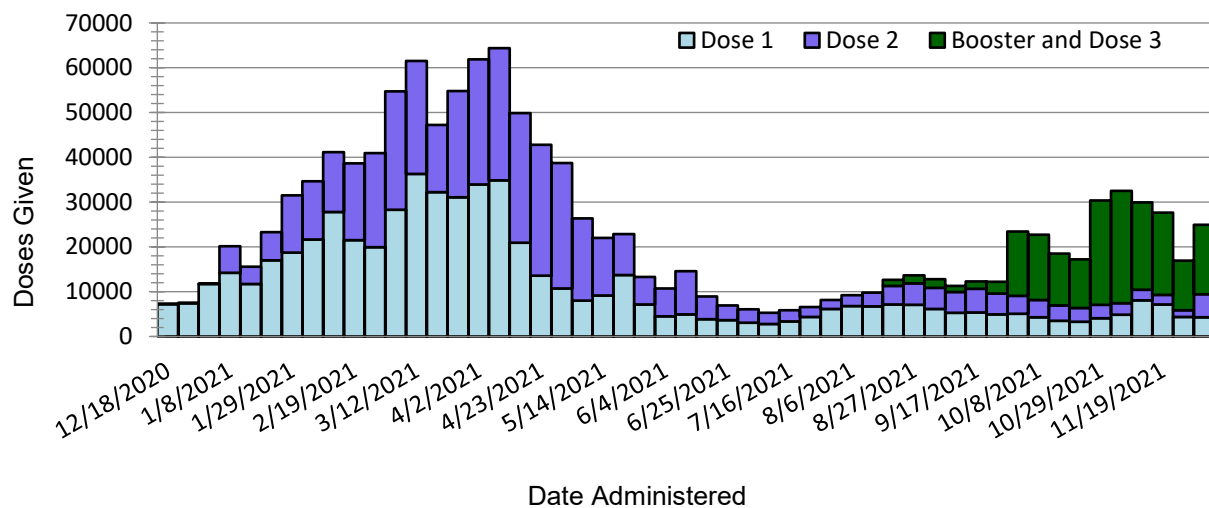
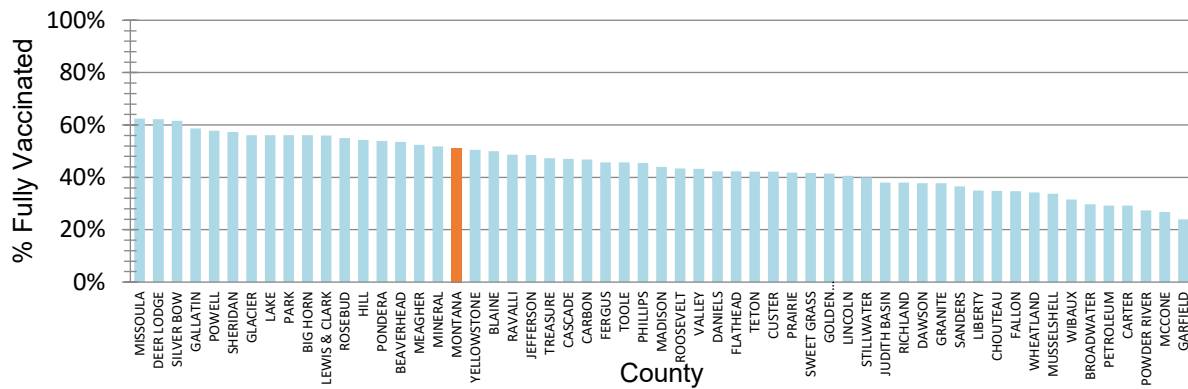


Figure 4. Percent of Eligible Montanans (5+ years) Fully Vaccinated by County – Montana, 12/3/2021



Variant and Breakthrough Cases

Figure 6 displays the percentage of the most common SARS-CoV-2 lineages detected each week, among all samples sequenced that were collected that week. There were 7,734 samples that were sequenced and their lineages were reported to [GISAID](#) since September 2020; figure 5 displays the number of specimens sequenced by week. A variant is a lineage that has one or more mutations that differentiate it from other lineages in circulation. Currently, Delta and Omicron (B.1.1.529) are the only Variants of Concern, determined by the CDC. **There have been no Omicron variants detected in Montana at this time.** Of specimens collected and sequenced in October and November 2,284/2,288 (99%) are Delta. Delta has been the predominant variant in Montana since July 2021.

Figure 5. Number of COVID-19 samples sequenced by collection date, Montana 12/7/2021 [n=7,734]

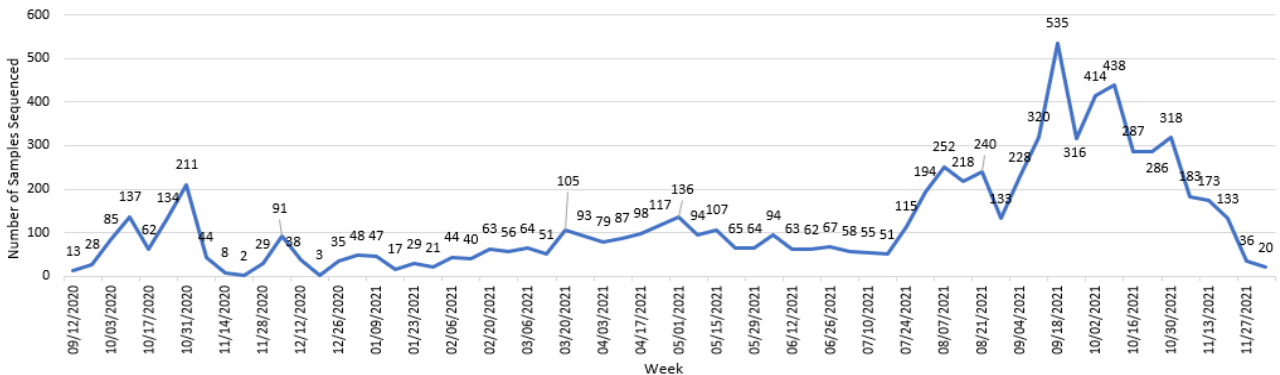
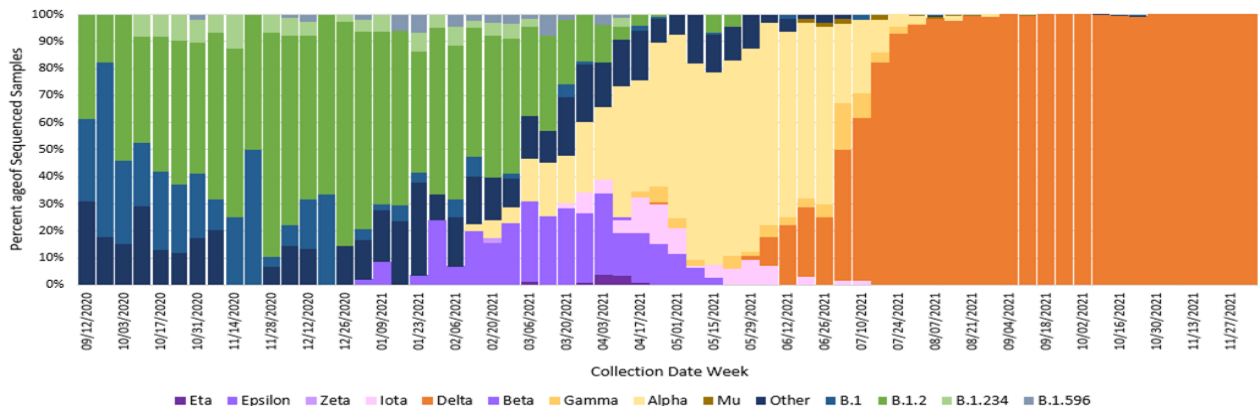


Figure 6. Percent of COVID-19 variants in sequenced samples by collection date, Montana 12/7/2021



A breakthrough COVID-19 infection is defined as a positive SARS-CoV-2 specimen collected ≥ 14 days after completing the primary COVID-19 vaccine series of an FDA-authorized COVID-19 vaccine. Depending on the specific vaccine administered, completion of series could be one or two doses of vaccine. As of 12/7/21, Montana reports 15,236 cases of confirmed breakthrough disease, which includes 880 hospitalizations and 263 deaths. Over the past 8 weeks (October 9 – December 3) the number of cases among unvaccinated individuals was 4.0 times higher than the number of cases among vaccinated individuals; the number of hospitalizations and deaths among unvaccinated individuals were 4.1 and 3.1 times higher, respectively, compared to vaccinated individuals.

Hospitalizations and Deaths and Vaccination Status

COVID-19-related hospitalizations and deaths were analyzed between **April 1 and December 3** to review vaccination status. Since the beginning of April this year, 83% of Montanans who were hospitalized and 77% of those who died were unvaccinated at the time of infection (Table 4). Of the 5,104 individuals who were hospitalized during this time period, 89 (2%) were <18 years old, 758 (15%) were 18 to 44 years old, 1,762 (35%) were 45 to 64 years old and 2,495 (49%) were ≥ 65 years old.

Additionally, COVID-19-related hospitalization and death data from **October 9 – December 3** (last 8 weeks) were analyzed to review vaccination status. Eighty percent of Montanans who were hospitalized and 75% of those who died had not received a COVID-19 vaccine (Table 5). Of the 1,760 individuals who were hospitalized during this time period, 34 (2%) were <18 years old, 197 (11%) were 18 to 44 years old, 601 (34%) were 45 to 64 years old and 928 (53%) were ≥ 65 years old.

Table 4. Vaccination status of COVID-19 hospitalizations and deaths – April 1 to December 3, 2021

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	5,104	1126
UNVACCINATED	4,239 (83%)	868 (77%)
VACCINATED (BREAKTHROUGH CASE)	865 (17%)	258 (23%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-102 (62)	23-103 (70)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	16-101 (74)	20-101 (81)

Table 5. Vaccination status of COVID-19 hospitalizations and deaths – October 9 to December 3, 2021

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	1,760	373
UNVACCINATED	1,416 (80%)	281 (75%)
VACCINATED (BREAKTHROUGH CASE)	344 (20%)	92 (25%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-96 (64)	23-103 (70)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	17-101 (73)	20-101 (80)

Reported COVID-19 Cases by County with Trendline – Montana, past 6 weeks

County	29-Oct	5-Nov	12-Nov	19-Nov	26-Nov	3-Dec	change from previous week*	Trendline
Beaverhead	48	12	22	35	15	12	-3	
Big Horn	31	51	138	174	16	11	-5	
Blaine	27	63	6	43	15	20	5	
Broadwater	19	34	26	22	33	22	-11	
Carbon	14	42	58	41	40	15	-25	
Carter	1	1	21	4	1	0	-1	
Cascade	337	387	565	273	115	172	57	
Chouteau	35	33	8	10	13	4	-9	
Custer	52	71	49	65	21	22	1	
Daniels	8	2	1	10	1	1	0	
Dawson	60	65	46	22	25	30	5	
Deer Lodge	34	18	18	11	8	12	4	
Fallon	26	11	19	14	11	17	6	
Fergus	71	51	62	28	10	14	4	
Flathead	515	402	342	339	229	180	-49	
Gallatin	477	462	426	381	218	364	146	
Garfield	11	9	10	1	1	3	2	
Glacier	60	65	95	52	48	20	-28	
Golden Valley	22	7	4	3	0	2	2	
Granite	14	8	3	1	3	1	-2	
Hill	69	56	54	26	11	24	13	
Jefferson	37	48	30	32	50	38	-12	
Judith Basin	8	6	3	0	2	0	-2	
Lake	205	96	138	101	70	55	-15	
Lewis and Clark	408	358	282	214	142	182	40	
Liberty	4	2	3	0	3	0	-3	
Lincoln	62	40	44	61	42	29	-13	
Madison	42	35	16	15	10	29	19	
McCone	6	6	13	12	0	6	6	
Meagher	8	9	4	2	3	5	2	

County	29-Oct	5-Nov	12-Nov	19-Nov	26-Nov	3-Dec	change from previous week*	Trendline
Mineral	15	7	12	10	5	4	-1	
Missoula	471	381	306	229	140	141	1	
Musselshell	59	17	25	33	19	22	3	
Park	97	188	41	63	31	53	22	
Petroleum	0	1	1	2	1	2	1	
Phillips	40	22	15	12	11	9	-2	
Pondera	9	9	4	13	10	4	-6	
Powder River	5	3	2	2	0	1	1	
Powell	51	20	22	12	9	13	4	
Prairie	3	4	5	6	3	7	4	
Ravalli	130	58	94	115	23	43	20	
Richland	31	61	29	73	11	40	29	
Roosevelt	76	96	100	56	28	35	7	
Rosebud	23	12	17	13	11	44	33	
Sanders	44	47	24	32	21	37	16	
Sheridan	14	6	7	6	10	18	8	
Silver Bow	149	128	85	106	51	76	25	
Stillwater	51	40	13	0	2	38	36	
Sweet Grass	20	11	8	4	2	11	9	
Teton	26	18	17	15	6	6	0	
Toole	16	15	5	4	3	5	2	
Treasure	5	6	0	6	7	7	0	
Valley	24	28	23	31	9	18	9	
Wheatland	5	4	3	0	1	3	2	
Wibaux	4	2	2	2	2	1	-1	
Yellowstone	1068	769	663	527	323	296	-27	
MONTANA	5147	4403	4029	3364	1895	2224	329	

*Note: Data are based on the date of report into the Montana Infectious Disease Information System (MIDIS). Underlined numbers in the above table reflect adjusted counts and may include cases diagnosed but not reported in earlier time frames. These adjustments result from local and state data reconciliation efforts, conducted to ensure accurate data.

County name	Eligible population 5+	Dose 1	Dose 2	Dose 3	Fully Immunized	Total Doses Administered	Percent eligible with first dose (5+)	Percent Fully Vaccinated (5+)
BEAVERHEAD	9,091	5,245	4,185	1,254	4,869	10,684	58%	54%
BIG HORN	11,975	7,610	6,363	1,713	6,715	15,686	64%	56%
BLAINE	6,044	3,330	2,822	1,032	3,021	7,184	55%	50%
BROADWATER	6,092	2,172	1,581	646	1,811	4,399	36%	30%
CARBON	10,476	5,312	4,578	1,718	4,907	11,608	51%	47%
CARTER	1,141	351	312	83	333	746	31%	29%
CASCADE	76,124	39,884	32,006	10,607	35,787	82,497	52%	47%
CHOUTEAU	5,430	2,094	1,718	904	1,891	4,716	39%	35%
CUSTER	10,692	5,068	4,017	1,555	4,507	10,640	47%	42%
DANIELS	1,559	703	608	239	660	1,550	45%	42%
DAWSON	8,071	3,315	2,768	871	3,052	6,954	41%	38%
DEER LODGE	8,887	6,055	4,974	2,278	5,534	13,307	68%	62%
FALLON	2,646	1,025	874	327	920	2,226	39%	35%
FERGUS	10,495	5,214	4,421	1,840	4,797	11,475	50%	46%
FLATHEAD	99,993	48,929	38,201	13,900	42,269	101,030	49%	42%
GALLATIN	110,900	77,585	59,297	19,730	65,110	156,612	70%	59%
GARFIELD	1,188	308	241	57	284	606	26%	24%
GLACIER	12,447	9,893	6,478	1,912	6,990	18,283	79%	56%
GOLDEN VALLEY	788	355	295	89	327	739	45%	41%
GRANITE	3,218	1,390	1,106	368	1,214	2,864	43%	38%
HILL	14,914	9,124	6,868	2,678	8,103	18,670	61%	54%
JEFFERSON	11,819	6,380	5,340	2,214	5,736	13,934	54%	49%
JUDITH BASIN	1,880	768	654	204	715	1,626	41%	38%
LAKE	29,280	18,689	15,281	5,618	16,433	39,588	64%	56%
LEWIS & CLARK	66,257	42,727	34,349	14,609	37,125	91,685	64%	56%
LIBERTY	2,234	824	682	344	780	1,850	37%	35%
LINCOLN	19,480	8,956	7,252	2,654	7,911	18,862	46%	41%
MADISON	8,589	4,202	3,355	1,443	3,776	9,000	49%	44%
MCCONE	1,562	436	410	148	418	994	28%	27%
MEAGHER	1,726	968	832	333	905	2,133	56%	52%
MINERAL	4,302	2,477	1,776	713	2,232	4,966	58%	52%
MISSOULA	115,881	80,717	66,545	26,159	72,403	173,421	70%	62%
MUSSELSHELL	4,458	1,633	1,318	393	1,506	3,344	37%	34%
PARK	15,969	10,587	8,077	2,974	8,960	21,638	66%	56%
PETROLEUM	483	154	132	51	141	337	32%	29%
PHILLIPS	3,675	1,814	1,371	689	1,670	3,874	49%	45%
PONDERA	5,389	3,381	2,549	964	2,904	6,894	63%	54%
POWDER RIVER	1,588	473	387	136	435	996	30%	27%
POWELL	6,534	4,020	3,010	746	3,775	7,776	62%	58%
PRAIRIE	994	447	394	191	415	1,032	45%	42%
RAVALLI	42,972	23,296	18,623	7,922	20,924	49,841	54%	49%
RICHLAND	10,310	4,198	3,263	1,102	3,920	8,563	41%	38%
ROOSEVELT	9,918	4,922	3,655	1,063	4,299	9,640	50%	43%
ROSEBUD	8,160	5,171	3,979	1,386	4,487	10,536	63%	55%
SANDERS	11,641	4,704	3,984	1,299	4,255	9,987	40%	37%
SHERIDAN	3,075	1,874	1,631	783	1,761	4,288	61%	57%
SILVER BOW	33,267	22,696	19,250	7,345	20,506	49,291	68%	62%
STILLWATER	9,451	4,139	3,249	1,335	3,782	8,723	44%	40%
SWEET GRASS	3,523	1,617	1,248	586	1,468	3,451	46%	42%
TETON	5,819	2,944	2,022	831	2,453	5,797	51%	42%
TOOLE	4,391	2,138	1,659	388	2,007	4,185	49%	46%
TREASURE	623	396	273	87	295	756	64%	47%
VALLEY	6,931	3,232	2,562	1,304	3,000	7,098	47%	43%
WHEATLAND	2,035	750	650	177	696	1,577	37%	34%
WIBAUX	898	327	274	44	283	645	36%	32%
YELLOWSTONE	153,378	86,859	71,558	24,941	77,492	183,358	57%	51%
MONTANA	1,020,663	593,878	475,307	174,977	522,969	1,244,162	58%	51%